AUGUST 1999

REPORT TO THE CONGRESS

Rethinking Medicare's Payment Policies for Graduate Medical Education and Teaching Hospitals

MEDPAC Medicare Payment Advisory Commission

1730 K Street, NW • Suite 800 • Washington, DC 20006
(202) 653-7220 • Fax: (202) 653-7238 • www.medpac.gov

Commission members

Gail R. Wilensky, Ph.D., Chair
Project HOPE
Center for Health Affairs
Bethesda, MD

Joseph P. Newhouse, Ph.D., Vice chair
Harvard University
Boston, MA

Term expires April 2000

Peter Kemper, Ph.D.
Center for Studying Health System Change
Washington, DC

Judith Lave, Ph.D.
University of Pittsburgh
Pittsburgh, PA

D. Ted Lewers, M.D.
Private practice of medicine
Easton, MD

Hugh W. Long, Ph.D., J.D.
Tulane Medical Center
New Orleans, LA

William A. MacBain
MacBain & MacBain, LLC
Ithaca, NY

Gerald M. Shea
AFL-CIO
Washington, DC

Term expires April 2001

Spencer Johnson
Michigan Health and Hospital Association
Lansing, MI

Woodrow A. Myers Jr., M.D.
Ford Motor Company
Dearborn, MI

Joseph P. Newhouse, Ph.D.

Alice Rosenblatt, F.S.A, M.A.A.A.
Wellpoint Health Networks
Thousand Oaks, CA

John W. Rowe, M.D.
Mount Sinai School of Medicine
Mount Sinai-NYU Medical Center and Health System
New York, NY

Gail R. Wilensky, Ph.D.

Term expires April 2002

Beatrice S. Braun, M.D.
AARP
Spring Hill, FL

Floyd D. Loop, M.D.
The Cleveland Clinic Foundation
Cleveland, OH

Janet G. Newport
PacifiCare Health Systems
Santa Ana, CA

Carol Raphael
Visiting Nurse Service of New York
New York, NY

Mary K. Wakefield, Ph.D.
College of Nursing and Health Science
George Mason University
Fairfax, VA

Commission staff

Murray N. Ross, Ph.D.
Executive director

Lu Zawistowich, Sc.D.
Deputy director

Jennifer Jenson, M.P.H., M.P.P.
Special assistant to the executive director

Helaine I. Fingold, J.D.
General counsel

Research directors

Jack Ashby, M.H.A.
Elizabeth Docteur, M.S.
Scott Harrison, Ph.D.
Kevin J. Hayes, Ph.D.
Julian H. Pettengill, M.A.

Analysts

Stephanie Bernell, Ph.D.
Louisa A. Buatti, M.H.S.
Andrew L. Cosgrove, M.P.P.
David V. Glass, M.S.
Janet C. Goldberg, M.P.H.
Timothy F. Greene, M.B.A.
Craig K. Lisk, M.S.
Stephanie Maxwell, Ph.D.
Susan Philip, M.P.P.
Nancy Ray, M.S.
Deborah Walter, M.P.A.
Susanne Weinrauch, M.D., M.P.A.
Judy A. Xanthopoulos, Ph.D.
Daniel Zabinski, Ph.D.

Administrative support

Wylene Carlyle
Diane E. Ellison
Plinie (Ann) Johnson
Molly Ryan
Cynthia Wilson

Preface

The Balanced Budget Act of 1997 (BBA) required the Medicare Payment Advisory Commission to examine the need for changes in federal policy affecting graduate medical education (GME), Medicare's payments to teaching hospitals, and federal health care workforce issues. (See legislative language from the BBA in the appendix.) This report fulfills MedPAC's mandate and provides a foundation for future work by the Commission.

The BBA required MedPAC to consult with outside experts in completing this study. The Commission has taken this requirement seriously and gratefully acknowledges the comments and insights of countless individuals and organizations. We have discussed issues related to GME at almost every meeting since MedPAC was created, always providing opportunities for interested groups to comment on the Commission's discussions. Last year, we convened a panel of outside policy experts to help identify key issues for consideration. We asked more than 200 organizations and individuals to share their ideas and concerns about GME and related policies, and in the course of this process received letters offering comments and suggestions for policy changes from more than 50 different groups. Both Commissioners and staff have had many in-person meetings and telephone conversations with interested parties to discuss the report and related issues.

In addition to discussing Medicare's role in supporting graduate medical education, teaching hospitals, and their interrelated missions, the Commission has also considered numerous healthcare workforce issues in its public meetings, including physician and resident supply, specialty mix, and geographic distribution; international medical school graduates (IMGs); and Medicare's current support for nursing and allied health professions training programs. We also explored the extent of medical schools' dependence on service-generated income and the implications of this dependence for the future of these institutions.

Most of the Commission's energy focused on how Medicare payment policies for graduate medical education and teaching hospitals should be changed. Our discussion led to the six recommendations included in this report that encourage policymakers to rethink Medicare's payment policies for graduate medical education, teaching hospitals, and related items in the context of Medicare's primary role: improving access to care for Medicare beneficiaries.

Executive summary

Executive summary

The Medicare Payment Advisory Commission (MedPAC) believes that policymakers should reorient their thinking about Medicare's payments for graduate medical education. Specifically, we believe that payments to teaching hospitals for the direct costs of operating approved medical residency programs should be viewed as payments for patient care, not as payments for training. Consistent with this belief, the Commission recommends that Medicare's two payments to teaching hospitals that are currently labeled as medical education should be combined into one payment that better accounts for the higher costs of the enhanced patient care those hospitals provide to Medicare beneficiaries.

An appropriately designed payment adjustment for enhanced patient care, together with certain technical refinements in Medicare's payments to hospitals, would help ensure access to the services teaching hospitals provide while simultaneously encouraging teaching hospitals to provide services efficiently. Our recommendation is not intended to achieve budgetary savings, but to focus Medicare's payments more appropriately. Because the Commission recognizes that changing current payment methods would have a significant impact on payments to individual hospitals, we recommend that these changes be phased in over several years. MedPAC will analyze the potential effects and policy issues of implementing a payment adjustment for enhanced patient care for our March 2000 report to the Congress.

This report describes the analytic principles that underlie the Commission's thinking and presents recommendations that lay out a conceptual framework for refining Medicare payments. Although much of the discussion focuses on payments to teaching hospitals for inpatient services, the principles outlined here apply to other teaching settings where higher payments may be justified on the basis of enhanced patient care being provided.

Medicare's goals

Medicare was enacted to improve access to health care services by reducing the financial burden faced by aged (and later disabled) people seeking medical care. In pursuit of this goal, the program seeks to ensure access for its beneficiaries to high quality, medically necessary care in an appropriate setting. Consequently, MedPAC believes that Medicare's payments should:

- induce providers to supply care efficiently,
- account for differences in the intensity and complexity of care provided,
- recognize the value of enhanced patient care provided in teaching hospitals and other settings where residents and other health professionals train when the added value of patient care justifies its higher costs, and
- not intentionally distort the supply of physicians and other health professionals.

What is Medicare buying from teaching hospitals?

Teaching hospitals incur two types of costs associated with operating approved graduate medical education programs. Direct costs comprise stipends paid to residents for the services they provide and other assigned program expenses such as salaries of supervising faculty. So-called indirect costs reflect the higher costs per case observed in teaching hospitals that cannot be allocated specifically to residency programs. Compared with other hospitals, teaching hospitals treat patients with more complex conditions and provide patient care that is more intensive and technologically sophisticated.

Medicare has recognized teaching hospitals' higher costs since the program began. Initially, no distinction was made between direct medical education costs and other costs of inpatient care. However, when policymakers were considering how to set limits on cost reimbursement—and later move to a prospective payment system (PPS)—they had to decide whether and how to account for Medicare's share of teaching hospitals' higher costs. They elected to pay the direct costs of graduate medical education separately and to pay the indirect costs incurred by teaching hospitals through a percentage add-on to base PPS rates.

MedPAC has concluded that the distinction between direct and indirect costs is an accounting artifact that should not continue to guide Medicare's payments to teaching hospitals or to other providers. Payments for the indirect costs associated with residency programs have been viewed as payments for patient care since the inception of the prospective payment system. We believe that the direct costs attributed to graduate medical education programs also reflect patient care, and that Medicare's payments for such costs should be viewed in this manner and not as payment for training.

Reclassifying residents' stipends as payment for patient care is straightforward because residents provide care as they learn. In addition, economic theory suggests that the costs teaching hospitals record for faculty salaries and residency program overhead are also for patient care. These costs substitute for the additional wages hospitals would otherwise need to pay residents to provide care if they were not also furnishing them with graduate medical education. Residents are willing to accept lower wages because the skills they acquire while providing care allows them to earn more in the future or achieve greater job satisfaction.

What should Medicare buy from teaching hospitals?

The Commission believes that the value of the enhanced patient care provided to Medicare beneficiaries in teaching hospitals justifies the costs of providing it. Accordingly, Medicare should adjust the payments it makes to teaching hospitals to reflect the higher costs of this care. In addition, the Commission believes that similar payment adjustments should also be developed for other settings where residents or other health professionals train when the added value of patient care justifies their higher costs.

How should Medicare pay for patient care in teaching hospitals?

Operationally, developing a payment adjustment for enhanced patient care in hospitals would entail replacing Medicare's current separate payments for direct and indirect graduate medical education costs with a single adjustment to its diagnosis-related group (DRG) payments for inpatient services. Concurrent with this change, MedPAC believes that several technical refinements should be made to make DRG payments and the enhanced patient care adjustment better match expected costs of inpatient care in all hospitals and to reduce teaching hospitals' incentives to train an excessive number of residents.

The Commission does not anticipate that implementing these policies would substantially alter aggregate program payments, although it would significantly affect Medicare's payments to individual hospitals. We therefore recommend that changes be phased in over several years and plan to make specific recommendations on how such changes should be implemented in our March 2000 report.

Medicare's current policy links hospitals' payments to the number of residents they employ and has the unintended consequence of increasing the supply of physicians. The changes that MedPAC is recommending would likely reduce—but not eliminate—hospitals' incentives to train more residents than they would otherwise.

How should Medicare pay for patient care in other teaching settings?

The principle that Medicare should recognize the value of enhanced inpatient care provided in teaching hospitals should be extended to other settings where residents and other health professionals train when two conditions are met. First, the cost of care is higher than that furnished in otherwise comparable settings; and second, beneficiaries receive enhanced care that justifies the higher costs.

Developing an adjustment for care provided in the outpatient department of teaching hospitals, while difficult to do in the near term, would help make Medicare's payments more closely match the expected costs of care in inpatient and outpatient settings. While conceptually appropriate, developing enhanced patient care adjustments for care provided outside the hospital setting is likely to be an ambitious task.

Medicare and federal workforce policy

The Commission recognizes that Medicare's payment policies influence both providers' decisions about what kinds of staff to hire in providing care and the decisions of people seeking careers as health professionals. For example, Medicare policies with respect to coverage and payment for services used predominantly by Medicare beneficiaries will influence the number of people who choose geriatric medicine and other fields that serve primarily aged or disabled people.

However, consistent with the Commission's position that Medicare's primary purpose is ensuring beneficiary access to care, MedPAC does not advocate using Medicare payment policy as a primary tool for affecting the overall supply, specialty mix, and distribution of health care professionals. Instead, the Commission believes that specific targeted programs may be a more appropriate vehicle for achieving these workforce goals.

Table of contents

Commission members iii

Commission staff v

Preface vii

Executive summary ix

Rethinking Medicare's Payment Policies for Graduate Medical Education and Teaching Hospitals 1

Medicare's goals 3

What is Medicare buying from teaching hospitals? 4

What should Medicare buy from teaching hospitals? 8

How should Medicare pay for patient care in teaching hospitals? 9

How should Medicare pay for patient care in other teaching settings? 13

Medicare and federal health workforce policy 14

Future work 15

Appendix 19

Rethinking Medicare's Payment Policies for Graduate Medical Education and Teaching Hospitals

RECOMMENDATIONS

1 Medicare should pay more for patient care in teaching settings when the enhanced value of that care justifies its higher costs.

2 The Congress and the Secretary should improve the diagnosis related groups to reflect more accurately the relationship between illness severity and the cost of inpatient care, thereby making Medicare payments more consistent with efficient providers' costs.

3 The Congress should revise Medicare's payments to recognize the higher value of patient care services provided in teaching hospitals through an enhanced patient care adjustment.

4 The Congress should phase in the payment adjustment for enhanced patient care and any related policies that substantially change payments to individual providers.

5 The Congress and the Secretary should develop payment adjustments for enhanced patient care in all settings where residents and other health care professionals train when the added value of patient care justifies its higher costs.

6 Federal policies intended to affect the number, specialty mix, and geographic distribution of health care professionals should be implemented through specific targeted programs rather than through Medicare.

Under the Balanced Budget Act of 1997 (BBA), the Congress required the Medicare Payment Advisory Commission (MedPAC) to examine the need for changes in Medicare's payment policies and other federal policies that affect graduate medical education (GME), payments to teaching hospitals, and other health care workforce training (see the Appendix for the legislative language). This request was motivated by several concerns reflecting the different perspectives of important stakeholders. One was whether Medicare, given its uncertain financial prospects, should continue to pay for graduate medical education programs that were seen as primarily benefitting physicians who are expected to earn high incomes in later private practice. Another concern was the appropriateness of wide variation in Medicare's payments to teaching hospitals. A third concern was the perception that supporting GME programs through Medicare's hospital payment policies was distorting teaching hospitals' decisions about the number and specialty mix of physicians to train and about the appropriate sites for training. These concerns were further heightened by widespread uncertainty in the teaching hospital community about private insurers' future payment policies. Many were pessimistic that insurers operating in increasingly competitive markets would continue to support teaching hospitals' GME programs, applied research, and other specialized activities by paying more than these providers' costs for the patient care services furnished to their enrollees.

This report develops a conceptual framework that MedPAC believes policymakers should use in rethinking Medicare's payment policies for graduate medical education and teaching hospitals. The Commission's framework ultimately derives from Medicare's goals. But it also considers the value of the enhanced patient care beneficiaries receive in teaching hospitals and other settings that conduct health professions training, and who bears the costs of general training, such as that provided in residency programs. Based on these considerations, the Commissinon has crafted six recommendations that should guide the development of refinements in Medicare's payments to teaching hospitals and to providers in other settings where residents and other health professionals train. Although these recommendations indicate the broad direction for policy change, they do not specify fully detailed policies that could be adopted immediately. MedPAC will continue to develop and examine the operational changes needed to implement these policies with the goal of making specific recommendations in its March 2000 report to the Congress on Medicare payment policy.

Medicare's goals

Medicare was enacted to improve access to care by reducing the financial burden faced by elderly (and later disabled) people in obtaining medically necessary services. Accordingly, Medicare's principal goal is to ensure that its beneficiaries have access to high quality care in the most appropriate clinical setting. At the same time, program policies must balance the interests of the providers who furnish care and the beneficiaries and taxpayers who finance that care.

To ensure access to care in the most appropriate setting, Medicare's payment policies must encourage providers to supply high quality services to its beneficiaries and to produce those services efficiently. To accomplish these objectives, the program's payment rates must be consistent with efficient providers' costs of producing appropriate care. This means that the payment rates must approximate efficient providers' costs and also account for predictable differences in unit costs that arise from clinically appropriate variations in service complexity and intensity. In addition, Medicare's payments should neither encourage nor discourage providers' use of particular types of resources in producing care.

These principles help to ensure that Medicare's limited funds are used effectively and that providers' payments enable them to furnish services that are of value to program beneficiaries.

What is Medicare buying from teaching hospitals?

Teaching hospitals—facilities that operate approved residency training programs—generally incur higher expenses than hospitals without teaching programs. Medicare's hospital payment policies have always recognized the program's share of these higher costs by making additional payments to teaching facilities. In fiscal year 1999, these additional payments are projected to account for $6.2 billion in program spending (CBO).

Given the goals and objectives identified earlier, Medicare's additional payments to teaching hospitals have raised questions about what the program is buying and whether the value of what it is buying is worth the added costs. Past thinking about these questions has been anchored in the cost accounting framework underlying Medicare's original cost reimbursement method for paying facility providers. That framework suggests that although teaching hospitals produce multiple products, such as graduate training for resident physicians, training for other health professionals, applied research, and patient care, the costs generated by these activities can be separated accurately.

The cost accounting view of what Medicare is buying

For more than 15 years, Medicare paid hospitals and other facility providers, such as hospital outpatient departments and skilled nursing facilities, according to the program's share of their incurred allowable costs. Cost reimbursement was implemented through a set of cost accounting rules that providers applied in filing annual cost reports at the end of their fiscal years. These rules enabled Medicare to:

- identify categories of allowable and non-allowable expenses,
- allocate allowable overhead costs (such as housekeeping and administrative expenses) among a facility's patient care and other activities,
- separate costs for inpatient care from those for outpatient care or other services, and,
- determine the share of the provider's expenses the program would pay for each activity.

Segregating each provider's costs for various activities—such as residency training programs, other training, and research—from those for patient care was necessary under cost reimbursement. Costs associated with some activities (research or consumer advertising, for example) were not allowable for reimbursement because they were not considered necessary or sufficiently related to the production of patient care. The Congress, however, explicitly allowed hospitals' costs for operating training programs for residents and other health professionals based on the belief that "... these activities enhance the quality of care in an institution..." (House Report 213, 89th Congress).

Costs for different activities also were segregated because the basis for determining Medicare's share of costs could differ depending on the nature of the activity. For instance, Medicare's share of a provider's costs for radiology services was based on its share of the facility's total radiology service charges. Medicare's share of residency program costs, however, was based on how residents' time was allocated among the hospital's activities and the program's share of the facility's charges in each activity.

Although they were accounted for separately, Medicare initially made no payment distinction between hospital costs that were directly attributed to operating approved training programs (residents' stipends, compensation for teaching faculty and program administrative staff, and allocated facility overhead) and other costs for patient care (those for nursing care or medical supplies, for example). In the mid-1970s, however, policymakers began to consider how to set limits on the amount of allowable costs that would be reimbursed. Consequently, they had to decide whether, and how, to account for teaching hospitals' higher costs.

Initially, only routine patient care costs per patient day (expenses for room, board, and routine nursing care) were subject to the new reimbursement limits. Following the logic of the cost accounting framework, the Health Care Financing Administration (HCFA) eventually decided that direct costs for training programs represented costs of education rather than routine care. As a result, HCFA excluded costs for approved training programs (those for residents and for other health professions) from the reimbursement limits and Medicare continued to pay its share of these costs as before.

But excluding the direct costs of training programs accounted for only part of the higher per diem costs incurred by teaching hospitals. Further analysis showed that the presence of residency training programs was associated with an increase in providers' per diem routine patient care costs, and that the size of the increase was strongly associated with the intensity of the facility's resident training activity as measured by its number of residents per bed. In response to these findings, HCFA adopted an adjustment, called the indirect medical education (IME) adjustment, which raised the reimbursement limits for teaching hospitals depending on their resident to bed ratios.

The Congress codified these policies in law, paying separately for the direct costs of approved training programs and requiring HCFA to apply a revised IME adjustment, when it expanded Medicare's routine per diem reimbursement limits to cover operating costs per discharge in the Tax Equity and Fiscal Responsibility Act of 1982. These policies were reaffirmed when the Congress adopted the hospital inpatient prospective payment system (PPS) in the Social Security Amendments of 1983.

Although the Congress subsequently decided to pay for teaching hospitals' direct costs of approved residency training programs based on prospectively determined per resident amounts, these payments were still viewed as covering Medicare's share of the costs of physician training. By contrast, the IME adjustment was always seen as providing teaching hospitals with additional payments to cover the higher inpatient care costs associated with the greater complexity and intensity of the services they furnished.

Policymakers understood that the IME adjustment was needed for two reasons. One was that teaching hospitals tend to offer a broader array of technologically sophisticated services than other hospitals; thus some patients in these facilities would receive complex and costly services unavailable elsewhere. A related reason was that teaching hospitals tend to attract patients with greater severity of illness who require more complex and costly treatment, but the case-mix adjustment based on diagnosis related groups (and thus the payment rates under Medicare's inpatient PPS) did not fully capture these severity differences or their impact on patient care costs.

Medicare's current payment policies for teaching hospitals

Medicare's current payment policies for teaching hospitals still reflect the cost accounting distinction between the direct costs of resident training programs and the indirect or added patient care costs associated with teaching intensity as measured by the facility's resident to bed ratio. In fiscal year 1999, Medicare's payments for hospitals' direct costs of GME programs are expected to amount to $2.2 billion, and those for indirect costs related to GME programs will account for $3.7 billion. In addition, Medicare will pay $300 million for hospitals' incurred costs of operating approved training programs for other health professionals, such as nurses and various types of technicians.

Payments for direct costs of residency training programs

Medicare pays for its share of hospitals' direct GME costs based on prospectively determined, hospital-specific per resident amounts. A hospital's direct GME payment primarily reflects the product of three components. The first is the hospital's direct GME costs per resident in 1984, updated for inflation to the current year. The second component is the hospital's current number of full-time-equivalent (FTE) residents. The third component is Medicare's share of the hospital's inpatient days.

Hospitals' resident counts are subject to several rules. A facility may count residents training both in and outside of the hospital as long as it pays substantially all of the training costs (including residents' stipends and benefits and faculty supervisory costs). However, residents training beyond their period of initial residency (the smaller of the minimum period required for board eligibility in a specialty or five years) are counted as only 0.5 FTEs. To discourage further growth in the number of residents, the BBA placed a cap on the number of residents a hospital could count for determining GME payments.

Hospitals' payment amounts also depend on their mix of residents' specialties. Payments are about 6 percent higher for residents in primary care (family practice, general internal medicine, general pediatrics, and obstetrics and gynecology) and other selected specialties (geriatrics, public health and preventive medicine), compared with those in other specialties.

continued on page 7

What is Medicare really buying?

MedPAC has concluded that the distinction between the direct and indirect costs of training programs is artificial and incompatible with the pressures providers face in competitive markets. In the analytic framework of economics, the direct and indirect costs associated with training programs are indistinguishable; both represent costs of providing patient care. Therefore, the distinction between these costs is not a valid guide for making payments to hospitals (or other providers offering health professions training programs) that face competitive markets for patient care and the resources they purchase to produce that care.

Medicare's current payment policies for teaching hospitals

continued from page 6

Payments for indirect costs of medical education programs

Medicare pays for its share of the indirect costs associated with hospitals' resident training activities by applying a percentage add-on to each teaching facility's per discharge payments under the hospital inpatient prospective payment system (PPS). Under PPS, each hospital is paid a fixed rate per Medicare discharge to cover its operating costs. A separate payment, determined in a similar way, is made for a hospital's capital costs. These per discharge payment rates are adjusted to reflect the relative level of local prices for labor and capital in the hospital's area and to reflect the relative costliness of cases in the diagnosis related group (DRG) to which each patient is assigned. The adjusted payment rates are the hospital's basic DRG operating and capital payments. In addition, a hospital may receive operating and capital outlier payments for any cases that are exceptionally costly relative to other cases in the same DRG.

A teaching hospital's operating IME payments are determined as a percentage add-on to its basic DRG operating payments. The add-on percentage is based on the hospital's ratio of residents to its beds. A similar add-on to PPS capital payments is determined by the ratio of residents to occupied beds. For fiscal year 1999, the IME adjustment for PPS operating payments is set at approximately 6.5 percent for every 10 percentage point increment in the ratio of residents to hospital beds.[1] Consequently, one-half of all teaching hospitals receive an adjustment through their operating payments of 6.7 percent or more; 10 percent receive adjustments of more than 29 percent. For capital payments, it is set at about 2.9 percent for every 10 percentage point increment in the ratio of residents to occupied beds. ■

1 The IME adjustment for PPS operating payments was set at 7.7 percent for every 10 percentage point increment in the ratio of residents to hospital beds prior to the passage of the Balanced Budget Act of 1997. The BBA lowered the adjustment to 7.0 percent for fiscal year 1998, 6.5 percent for fiscal year 1999, 6.0 percent for fiscal year 2000, and 5.5 percent for fiscal year 2001 and beyond. As is the case for direct GME payments, the number of residents a hospital can count in its IME payment formula is capped.

In competitive markets, a rational firm will not pay for the cost of general training such as residency training (Becker 1975, Feldman and Yoder 1980). Once trained, residents and other health professionals can use their acquired skills to gain employment elsewhere at a salary commensurate with their new skill level. Because the provider that furnishes general training has no way of capturing a return on its investment, it has no financial incentive to pay for training costs.

Instead, residents bear the cost of training by providing patient care and other services in conjunction with their training that are of value to the institution where they train, while accepting compensation for the services they provide that is lower than they might otherwise be able to earn given their skill level.[1] Residents and other trainees are willing to bear the cost of their training because it increases their future earning potential and job satisfaction.

1 Because they have extensive training in the life sciences, residents have a broad array of alternative employment opportunities other than providing clinical services.

Residents earn a stipend because they provide patient care and perform other services that are of value to the hospital. Other things being equal, this stipend reflects the value of the services residents furnish minus the cost of their training. The direct cost of their training is reflected in the remaining direct GME expenses for faculty supervision, administrative staff, and facility overhead. In principle then, the direct GME costs that hospitals report on their Medicare cost reports represent the net value of the patient care services residents provide. The same logic applies to the direct costs of other health professions training programs, such as those for nurses.

The premise that residents bear the costs of their own training implies that the distinction between direct and indirect GME costs is not economically meaningful. Direct costs are, in effect, patient care costs. Since residents bear the cost of their training, Medicare is paying not for training costs but rather for patient care. The services provided by residents and other trainees are just one part of the enhanced patient care furnished in teaching hospitals.

What should Medicare buy from teaching hospitals?

The Commission believes that the value of the enhanced patient care in teaching hospitals justifies the higher cost of providing it. Consistent with its goal of ensuring beneficiaries' access to medically necessary care in the most appropriate clinical setting, Medicare should adjust its payments to teaching hospitals to reflect the higher cost of the care they furnish.

RECOMMENDATION 1

Medicare should pay more for patient care in teaching settings when the enhanced value of that care justifies its higher costs.

The higher patient care costs observed in teaching hospitals reflect a number of factors that are likely to strengthen the clinical care Medicare beneficiaries and other patients receive. Compared with other hospitals, teaching facilities tend to undertake more applied clinical research aimed at developing and testing new diagnostic and therapeutic technologies, such as imaging methods, drugs and devices, and surgical procedures. They also tend to hire a more costly mix of staff, including teaching faculty and technical specialists needed to provide advanced training, research, and patient care. Consequently, teaching facilities generally offer a broader and more technically sophisticated array of services, attract patients who are more acutely ill, and furnish care that is more complex and costly, than do other hospitals.

Graduate medical education and other training activities also tend to enhance the care provided to beneficiaries in other ways. The team approach to care strengthens clinical decisionmaking and provides additional oversight of care quality. Moreover, in teaching settings residents are readily available to assess and respond to changes in patient status.

Medicare has traditionally paid for the enhanced patient care available to its beneficiaries in teaching hospitals, although partly under the label of medical education. MedPAC recommends that Medicare continue to pay for this care when the benefits exceed the additional cost.

How should Medicare pay for patient care in teaching hospitals?

As discussed earlier, one of Medicare's primary goals is to ensure beneficiaries' access to care. To do this, Medicare payments must approximate efficient providers' patient care costs, reflecting differences in cost that arise from differences in patient complexity and in the complexity and intensity of the care provided.

To better capture cost differences, Medicare payment policies should be changed in two ways. First, to recognize the higher acuity level of patients in teaching hospitals, Medicare's case-mix measurement methods must account more fully for differences in illness severity among patients. Second, to reflect more accurately the enhanced value of services teaching hospitals furnish, Medicare's IME adjustment and direct GME payment should be combined into a single payment adjustment that would be applied to the per case payment rates under PPS. In addition, to reduce the potential influence on hospitals' demand for residents of the resident to bed ratios in current GME payments, the enhanced patient care adjustment would ideally be based on some other proxy measure that does not involve counting residents.

Improving case-mix measurement to account for differences in illness severity

Medicare's capacity to set accurate payment rates under the hospital inpatient prospective payment system depends critically on the effectiveness of its case-mix measurement methods. The current case-mix measure is based on two components. One is the diagnosis related groups (DRG) patient classification system, which defines about 500 distinct patient categories. The other is a set of relative weights for all DRGs, which measures the expected relative costliness of a typical patient in each category compared with the average cost for all patients.

On average, beneficiaries treated in teaching hospitals are sicker than those seen at other hospitals. However, the current DRGs and relative weights do not fully capture differences in expected patient care costs that arise from differences in the severity of illness among patients. The current IME adjustment partly reflects higher costs in teaching hospitals that are due to unmeasured differences in the illness severity of their patients.

RECOMMENDATION 2

The Congress and the Secretary should improve the diagnosis related groups to reflect more accurately the relationship between illness severity and the cost of inpatient care, thereby making Medicare payments more consistent with efficient providers' costs.

To improve the accuracy of Medicare's inpatient case-mix measurement methods, the Congress and the Secretary should examine three policy changes. The first is refining DRG definitions to reflect illness severity more accurately by expanding the number of patient categories to account more fully for how coexisting conditions and complications affect the cost of care.

The other two policy changes would make DRG weights better reflect the relative costliness of cases across DRGs. The first of these changes would alter the method for calculating weights to account better for differences in the markups hospitals apply in setting charges. Cases in high-cost DRGs tend to be concentrated in hospitals with high costs and high markups, while cases in low-cost DRGs are concentrated in hospitals with low costs and relatively low markups. As a result, relative weights—which are now based on national average charges per case in each DRG—tend to overstate the expected costliness of high-cost DRGs and understate that for low-cost DRGs. MedPAC anticipates that a technical change in the method used to calculate the DRG weights would reduce these errors.

The second improvement would involve financing outlier payments for extremely costly cases based on the prevalence of such payments in each DRG, instead of reducing payments in all DRGs by a flat percentage as currently required. Outlier cases and payments are relatively concentrated in high-cost DRGs, but DRG weights are calculated based on national average charges per case in each DRG, without accounting for differences in outlier spending. As a result, the weights in high-cost DRGs tend to be overstated. MedPAC anticipates that financing outlier payments on a DRG-specific basis would make relative weights measure more accurately the expected relative costliness of typical patients in each category.

Other things being equal, these improvements in case-mix measurement would make PPS payments reflect more accurately efficient hospitals' costs. They would also redistribute payments among hospitals. Consequently, a phase-in period probably would be desirable to cushion the effects of these policies.

Further, although HCFA has authority to make changes in the DRG definitions and weights, the method of financing outlier cases is set in law. In addition, previous refinements to the DRGs have led to changes in hospitals' coding practices that often substantially increased measured case mix and PPS payments, but HCFA does not now have authority to offset the anticipated impact of coding changes when adopting refinements such as those suggested here. The Commission will consider these issues further as it begins to develop specific recommendations later this year.

Recognizing the enhanced value of patient care services in teaching hospitals

Compared with other hospitals, teaching hospitals' higher costs in part reflect differences in the complexity and intensity of services they furnish. As indicated earlier, MedPAC believes that the value of the enhanced patient care furnished by teaching hospitals justifies their higher costs.

RECOMMENDATION 3

The Congress should revise Medicare's payments to recognize the higher value of patient care services provided in teaching hospitals through an enhanced patient care adjustment.

MedPAC envisions an enhanced patient care (EPC) adjustment that would combine Medicare's current additional payments to teaching hospitals into a single adjustment to PPS payments for patient care.[2] This adjustment would help to ensure beneficiaries' access to care in teaching hospitals by making Medicare's payments reflect the added cost of the services these facilities provide. Teaching hospitals would continue to face financial incentives to produce care efficiently because payments still would be tied to bundles of services represented by the refined DRGs.

In principle, creating a single adjustment would involve two steps. First, direct GME costs would be added to other inpatient care costs to get a better measure of the actual costs of care per discharge. Second, the relationship between the revised measure of inpatient costs per discharge and some measure of teaching hospitals' patient care enhancements (such as residents per bed) would be estimated.

In practice, however, integrating direct GME costs into patient care payments through an EPC adjustment raises several difficult issues. One is the question of which direct GME costs should be incorporated into hospitals' costs per discharge. Another issue concerns which measures and methods should be used in estimating the proposed EPC adjustment. A third issue concerns the impact this policy change may have on Medicare's overall payments to hospitals for inpatient care. Finally, policymakers need to consider how an EPC adjustment should be implemented for teaching hospitals (or inpatient units) that are exempt from PPS.

What GME costs should be included? In combining direct GME costs with teaching hospitals' other inpatient care costs, should policymakers include teaching hospitals' current direct GME costs or their current direct GME payments? Using the most recent direct GME cost data for determining the EPC adjustment would allow payments to reflect the current relationship between teaching intensity (or some other proxy measure) and inpatient costs per case. If the relationship were based on current payments, the adjustment would reflect hospitals' direct per resident costs from 1984 updated for inflation plus the effect of the resident weighting factors on payments. Using current GME costs might increase aggregate Medicare payments to hospitals because Medicare's share of these costs substantially exceeds its aggregate GME payments.

A second issue is what to do about direct GME costs related to the time residents spend in other settings, such as outpatient care units. The direct GME costs teaching hospitals report on their Medicare cost reports reflect the full accounting costs borne by the hospital for its approved GME programs. Some of these costs, however, reflect the time residents spend in hospital outpatient departments and other ambulatory settings. How costs related to other settings are treated would affect the estimated EPC adjustment, and it might also affect hospitals' incentives regarding allocation of residents among settings. A similar issue arises about whether to include the portion of residents' time spent in other settings in hospitals' resident counts. Whether or not analogous EPC adjustments would be implemented in making payments for services in those other settings would also be an important consideration in deciding these issues.

2 The EPC adjustment, like the current IME adjustment, would be applied as a percentage add-on to hospitals' base DRG payment rates. Consequently, EPC payments would automatically reflect adjustments, such as that for local labor price levels, built into the DRG payment rates.

What measures and methods should be used? Estimating an EPC adjustment raises a number of important technical issues. One issue concerns what measure can or should be used to represent the extent of the patient care enhancements available at each teaching hospital. In its current IME adjustments for operating and capital payments, Medicare relies on proxy measures that are based on the number of residents (ratios of residents to beds and residents to occupied beds, respectively). With currently available tools, enhanced patient care cannot be directly measured. The virtue of the current teaching intensity measures is that they appear to capture or explain a plausible portion of the variability in teaching hospitals' costs. But the disadvantage is that hospitals receive higher payments if they have more residents, creating incentives to employ more residents than they otherwise would. Ideally, other proxy measures could be developed that would capture the enhanced value of patient care provided by teaching hospitals without using the count of residents. Accordingly, the Commission will search for reasonable alternatives.

Developing an EPC adjustment also will raise a variety of other issues regarding data and technical methods. The Commission anticipates that some refinements in methods—such as using more recent data and adopting some technical improvements in the statistical methods— likely will result in better estimates of the relationship between resident intensity and hospital costs per case.

What impact should the EPC adjustment have on aggregate payments to teaching hospitals? Another issue is whether an EPC adjustment should be implemented in a budget-neutral manner. The level of the new enhanced patient care adjustment should reflect as closely as possible the efficient cost of providing care in teaching hospitals. Whether this means higher or lower payments to teaching hospitals depends on how policymakers resolve the issues just raised.

How should an enhanced patient care adjustment be implemented for PPS-exempt facilities? The preceding discussion has focused on PPS inpatient payments, but many residents train in hospitals and units that are not subject to Medicare's inpatient PPS. Excluded hospitals and units are paid under provisions of the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA). The TEFRA payment system does not have an IME adjustment, although payments are based on hospital-specific rates, subject to rate of increase limits. Like PPS hospitals, these hospitals receive separate direct GME payments. To incorporate direct costs into inpatient rates for this set of providers, the base target amounts would need to be revised to include inpatient GME costs as a part of inpatient operating costs.

Should the enhanced patient care adjustment be reflected in payments to Medicare+Choice plans?

Under current law, Medicare's payments for direct GME and indirect medical education are gradually being removed from the base used to calculate payment rates for Medicare+Choice plans. Instead, payments will be made directly to teaching hospitals when they provide care to Medicare+Choice enrollees. We recognize that our recommendation to develop an enhanced patient care adjustment raises a number of issues concerning treatment of this adjustment for the purpose of paying Medicare+Choice plans. These issues are complex and will be the subject of future discussions by the Commission.

Phasing in payment policy changes

The policy changes the Commission is recommending are not intended to produce large increases or decreases in Medicare spending. The main focus of these recommendations is to help improve the accuracy of overall Medicare payment policy. Creating a new enhanced patient care adjustment, however, and making other improvements to Medicare payment policies potentially would redistribute a substantial amount of Medicare revenues across providers. Hospitals that had high per resident payment amounts for direct medical education costs, for instance, could see a decrease in payments, while those with low per resident payments could see an increase. But these effects may be muted by the other changes MedPAC proposes.

RECOMMENDATION 4

The Congress should phase in the payment adjustment for enhanced patient care and any related policies that substantially change payments to individual providers.

A sharp change in Medicare payments has the potential for placing some hospitals under unnecessary financial stress, which could hurt beneficiary access to needed services. Phasing in these changes would help to cushion some of the financial impact of these policies. Transition mechanisms have been an important part of many Medicare payment policy changes. When the inpatient PPS was first implemented, there was a three-year phase-in from hospital-specific rates to national rates. The transition to PPS for inpatient capital payments has taken place over 10 years.

The appropriate time period and type of transition mechanism will depend on the estimated impact of potential policy changes on providers and beneficiaries. For its March 2000 report, the Commission will be conducting analyses to help identify an appropriate transition mechanism and phase-in period.

How should Medicare pay for patient care in other teaching settings?

The principles discussed previously need not be confined to the inpatient setting or to physician training. As with inpatient care, patient care costs may be higher in other settings where teaching takes place because a different set of services is being produced. These settings may treat a more acute patient mix, offer a broader scope of services, provide more intensive treatment, or employ a more costly mix of staff. Care may also be enhanced by the presence of other types of health professional training programs.

RECOMMENDATION 5

The Congress and the Secretary should develop payment adjustments for enhanced patient care in all settings where residents and other health care professionals train when the added value of patient care justifies its higher costs.

Recognizing the potential contribution of residents and other trainees to patient care services in other settings would improve the consistency of Medicare's payment policies across settings, giving providers incentives to use the most appropriate setting for patient care and training. The same criteria that MedPAC applies to inpatient care would have to be met before an enhanced patient care adjustment were made. First, the cost of efficiently provided care must be higher. Second, the care being provided must be considered more valuable.

Where these criteria would be met is an empirical question that will need further examination. To develop enhanced patient care adjustments for other settings, costs historically included in direct GME payments would have to be allocated to the settings in which trainees furnished services. For example, resident salary expenses related to the time spent providing patient care in the hospital outpatient department should be classified as hospital outpatient costs. In addition, appropriate proxies for the extent to which patient care is enhanced would have to be developed for the facilities that participate in residency training. While the data necessary to develop an enhanced patient care adjustment for hospital outpatient services may be available, the data necessary for determining whether adjustments are needed in other settings currently are not.

The Commission believes that the presence of non-physician health professional training programs in a facility may also contribute to enhancing the care provided to Medicare beneficiaries in hospitals and other settings. However, there are virtually no data showing which providers train specific health professionals. A first step would be to identify providers that participate in these activities. Then we can determine whether these providers have higher patient care costs and whether they provide enhanced patient care that might warrant adjusting payment rates.

Medicare and federal health workforce policy

A well-trained supply of physicians and other health care professionals is essential to providing quality care for Medicare beneficiaries. This raises the question of what role the Medicare program should play in ensuring that this supply is available. The Commission has concluded that although Medicare spending for health care services influences the health workforce in many ways, payment policy is too blunt an instrument to rely on to achieve specific workforce goals.

RECOMMENDATION 6

Federal policies intended to affect the number, specialty mix, and geographic distribution of health care professionals should be implemented through specific targeted programs rather than through Medicare payment policies.

As the single largest payer for health care services, Medicare necessarily influences the market for health professionals. By covering aged and disabled people who previously had limited ability to pay for health care, Medicare greatly increased demand for the services of health care professionals. Medicare affects not only the overall demand for health professionals, but also their specialty mix and geographic distribution. Indeed, Medicare spending for health care services probably has a greater influence on the size and composition of the health workforce than any of the targeted payment policies intended to influence the workforce directly.

In general, markets correctly interpret the signals Medicare sends through its payment policies. By providing a steady source of revenue, the program encourages training in specialties associated with treating the illnesses of aged and disabled people. Where Medicare does not pay for services generally associated with a particular specialty, it may discourage training. For example, although several studies have indicated an inadequate supply of geriatricians, the number of geriatric training slots exceeds the number of people who choose to enter the specialty (Reuben). This may reflect a lack of payment for services such as palliative care and comprehensive geriatric assessment. Thus, Medicare's payments for specific services need to be considered in light of how they affect the supply of such services.

As with other career decisions, people deciding to enter a health profession weigh the benefits—in terms of the income, prestige, and job satisfaction they expect to attain—against the costs of acquiring the necessary training. By giving beneficiaries resources to buy health services, Medicare increases the incomes of health professionals and in so doing makes the cost of professional training a better investment. This benefit for health professionals helps ensure access to care consistent with Medicare's purpose.

Nonetheless, several reasons suggest that Medicare and the market do not always produce the supply and distribution of health care professionals that society desires. First, as is true for other professions, people seeking careers that require extensive training may not have the financial resources to acquire that training. Second, the time required to obtain training may mean that the supply of particular specialties lags the demand, while other specialties are in oversupply. Finally, the demand for health care professionals in isolated rural areas or high-poverty areas may not be adequate to support minimum basic services.

Medicare is not well-suited to addressing these concerns. Where the issue is access to extended training, education grants or loans may be a more effective means of improving access. Where the issue is the supply of health professionals at a particular time or in a particular place, programs that address health workforce specifically may provide better tools and broader vision to help ensure an acceptable mix of health professionals for both Medicare beneficiaries and the general population.

Future work

Over the coming year, MedPAC will begin to flesh out this set of recommendations. With an eye to ensuring beneficiary access to the enhanced patient care that teaching settings provide, the Commission will examine payment refinements aimed at measuring more accurately the cost of patient care in teaching settings.

For inpatient hospital payments, we will begin by analyzing the impact of refining the DRGs and their relative weights, and moving to DRG-specific outlier financing. Then, we will examine the effect of replacing the current direct GME and IME payments with an enhanced patient care adjustment. This enhanced patient care adjustment will be developed to reflect the relationship between teaching activity (or other proxy measures) and hospitals' patient care costs, including both reported direct medical education costs and other patient care costs.

The Commission will also begin to evaluate the need to adjust Medicare payments to account for the enhanced value of care in other settings where physicians train. In addition, we will consider whether differences in patient care associated with other health professionals' training programs justify similar payment adjustments.■

References

Becker GS. Human capital: a theoretical and empirical analysis, with special reference to education, second edition. Chicago, The University of Chicago Press. 1975.

Bradley T, Congressional Budget Office. Personal communication. Washington (DC). July 1999.

Feldman RD, Yoder SG. A theoretical analysis of GME financing in Hadley J, Urban Institute, editor, Medical education financing: policy analyses and options for the 1980's. New York, PRODIST. 1980.

Reuben DB, Beck JC. Training physicians to care for older Americans: progress, obstacles, and future directions. Washington (DC), National Academy Press. 1994.

U.S. House of Representatives. House report No. 213, 89th Congress, 1st session. 1965.

Appendix

The Balanced Budget Act of 1997 (BBA) required the Medicare Payment Advisory Commission to examine federal policy affecting graduate medical education (GME), Medicare's payments to teaching hospitals, and federal workforce issues. Following is the legislative language from the BBA.

SEC. 4629. RECOMMENDATIONS ON LONG-TERM POLICIES REGARDING TEACHING HOSPITALS AND GRADUATE MEDICAL EDUCATION.

(a) IN GENERAL.—The Medicare Payment Advisory Commission (established under section 1805 of the Social Security Act and in this section referred to as the "Commission") shall examine and develop recommendations on whether and to what extent medicare payment policies and other Federal policies regarding teaching hospitals and graduate medical education should be changed. Such recommendations shall include recommendations regarding each of the following:

(1) Possible methodologies for making payments for graduate medical education and the selection of entities to receive such payments. Matters considered under this paragraph shall include —

(A) issues regarding children's hospitals and approved medical residency training programs in pediatrics, and

(B) whether and to what extent payments are being made (or should be made) for training in the nursing and other allied health professions.

(2) Federal policies regarding international medical graduates.

(3) The dependence of schools of medicine on service-generated income.

(4) Whether and to what extent the needs of the United States regarding the supply of physicians, in the aggregate and in different specialties, will change during the 10-year period beginning on October 1, 1997, and whether and to what extent any such changes will have significant financial effects on teaching hospitals.

(5) Methods for promoting an appropriate number, mix, and geographical distribution of health professionals.

(b) CONSULTATION.—In conducting the study under subsection (a), the Commission shall consult with the Council on Graduate Medical Education and individuals with expertise in the area of graduate medical education, including —

(1) deans from allopathic and osteopathic schools of medicine;

(2) chief executive officers (or equivalent administrative heads) from academic health centers, integrated health care systems, approved medical residency training programs, and teaching hospitals that sponsor approved medical residency training programs;

(3) chairs of departments or divisions from allopathic and osteopathic schools of medicine, schools of dentistry, and approved medical residency training programs in oral surgery;

(4) individuals with leadership experience from representative fields of non-physician health professionals;

(5) individuals with substantial experience in the study of issues regarding the composition of the health care workforce of the United States; and

(6) individuals with expertise in health care payment policies.

(c) REPORT.—Not later than 2 years after the date of the enactment of this Act, the Commission shall submit to the Congress a report providing its recommendations under this section and the reasons and justifications for such recommendations.